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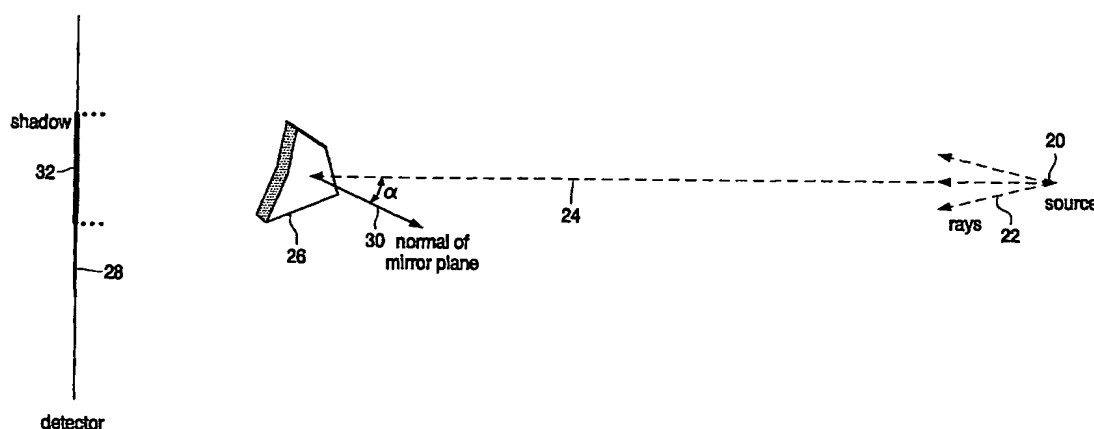
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[Continued on next page]

(54) Title: A METHOD AND APPARATUS FOR DETERMINING A POSE OF AN IMPLANT



(57) Abstract: A method for determining a pose of an implant object that is located inside a human or animal body uses a CAD model of that implant through a reconstruction X-Ray procedure that encompasses a translation-reconstruction run of the X-Ray arrangement viz  $\hat{o}$  viz the implant object. In particular, the method being comprises for an implant object that has a degree of symmetry according to an n-dimensional structure of symmetry the following. generating a first measurement configuration and a second measurement configuration regarding an X-Ray source and a prespecified implant position, and generating a first and a second implant shadow, respectively; assuming for each first and second measurement configuration an instance of the n-dimensional structure of symmetry; calculating for each of the first and second measurement configuration a pair of alternative poses of the implant object as being symmetrical with respect to the n-dimensional structure; and finding among the pairs of alternative poses two matching poses that thereby produce an angle information with respect to the n-dimensional structure of symmetry.

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